

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/893,023	06/27/2001	Frank O'Mahony	884.405US1	3406
75	590 01/22/2004		EXAM	INER
Schwegman, Lundberg, Woessner & Kluth, P.A.			SEFER, AHMED N	
P.O. Box 2938 Minneapolis, N			ART UNIT	PAPER NUMBER
.			2826	

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/893,023	O'MAHONY ET AL.
Office Action Summary	Examin r	Art Unit
	A. Sefer	2826
The MAILING DATE of this communic Period for Reply	cation appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC - Extensions of time may be available under the provisions or after SIX (6) MONTHS from the mailing date of this commu - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum statu - Failure to reply within the set or extended period for reply w - Any reply received by the Office later than three months after the period for reply w - Status	CATION. f 37 CFR 1.136(a). In no event, however, may a nication. days, a reply within the statutory minimum of thir utory period will apply and will expire SIX (6) MON ill, by statute, cause the application to become Al	reply be timely filed ly (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
1)⊠ Responsive to communication(s) filed	I on 20 October 2003.	
,)⊠ This action is non-final.	
3) Since this application is in condition for closed in accordance with the practice		
Disposition of Claims		•
4)⊠ Claim(s) <u>13-18 and 26-45</u> is/are pend	ling in the application.	
4a) Of the above claim(s) is/are	e withdrawn from consideration.	
5) Claim(s) <u>13-18,26,34-40 and 42-45</u> is	/are allowed.	
6) Claim(s) <u>27,28 and 31-33</u> is/are rejec	ted.	
7)⊠ Claim(s) <u>29,30 and 41</u> is/are objected	I to.	
8) Claim(s) are subject to restrict	ion and/or election requirement.	
Application Papers		
9)☐ The specification is objected to by the	Examiner.	
10) The drawing(s) filed on is/are:	a) accepted or b) objected to	by the Examiner.
Applicant may not request that any object	tion to the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including t		
11)☐ The oath or declaration is objected to	by the Examiner. Note the attached	d Office Action or form PTO-152.
Priority under 35 U.S.C. §§ 119 and 120		
12) Acknowledgment is made of a claim f	for foreign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a) All b) Some * c) None of: 1. Certified copies of the priority d	locuments have been received.	
2. Certified copies of the priority d		application No
3. Copies of the certified copies o		received in this National Stage
application from the Internation * See the attached detailed Office action	, , , ,	received.
13) Acknowledgment is made of a claim fo since a specific reference was included 37 CFR 1.78.	r domestic priority under 35 U.S.C.	§ 119(e) (to a provisional application)
a) The translation of the foreign lang		
14) Acknowledgment is made of a claim for reference was included in the first sentence.		
Attachment(c)		
Attachment(s) 1) Notice of References Cited (PTO-892)	4) \prod Interview S	Summary (PTO-413) Paper No(s)
2) Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449) Pa	O-948) 5) Notice of I	nformal Patent Application (PTO-152)

U.S. Patent and Trademark Office

Page 2

Application/Control Number: 09/893,023

Art Unit: 2826

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 20, 2003 has been entered.

Claim Objections

2. Claim 41 which depends on claim 34 is objected to because of the following informalities: Since the first and second differential lines of claim 41 have different structure/function from the first and second differential lines of claim 34, it is suggested that the first and second differential lines of claim 41 should read the third and fourth differential lines. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

⁽¹⁾ an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

⁽²⁾ a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Application/Control Number: 09/893,023

Art Unit: 2826

4. Claims 27, 28 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. USPN 6,144,224.

Page 3

Lee et al disclose (see figs. 2-5 and abstract) a microelectronic die comprising a clock signal source 49 to provide a clock signal; and a clock signal distribution network to distribute the clock signal to multiple clocked elements within the microelectronic die using salphasic (low skew) clocking techniques, the clock signal distribution network including a number of on-die interconnect sections having first 44a and second 44b differential signal lines on a first metal A/B layer of the microelectronic die, the first and second differential signal lines being substantially parallel to one another; and a number of conductive links 41a/41b, wherein a first conductive link of the number of conductive links couples the first differential signal line of a first one of the interconnect sections to the first differential signal line of the second one of the second differential signal line of the first one of the interconnect sections to the second differential signal line of the second differential signal line of the second one of the interconnect sections to the second

As for claim 28, Lee et al disclose a microelectronic die including a microprocessor circuitry 45.

As for claims 31-33, Lee et al disclose a number of traces 41a/41b including signal lines (as in claim 33) on metal layer A/B being capacitively coupled to and non-parallel or substantially orthogonal (as in claim 32) with said first and second differential signal lines.

Allowable Subject Matter

- 5. Claims 13-18, 26, 34-40 and 42-45 are allowed.
- 6. Claim 41 is objected to because of the above stated informalities.

Notice of References Cited Application/Control No. O9/893,023 Applicant(s)/Patent Under Reexamination O'MAHONY ET AL. Examiner A. Sefer Art Unit Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6,144,224	11-2000	Lee et al.	326/93
	В	US-6,532,544	03-2003	Masleid et al.	713/500
	С	US-5,397,943	03-1995	West et al.	326/39
	D	US-6,005,428	12-1999	Amdahl, Gene M.	327/161
	E	US-2003/0001652	01-2003	O'Mahony et al.	327/295
	F	US-6,411,151	06-2002	Nair et al.	327/291
	G	US-6,570,429	05-2003	Hellriegel, Stephen V. R.	327/295
	Н	US-			
	ı	US-			
	J	US-			
	К	US-	-		
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 1-289155	11-1989	Japan	Yamaguchi	
	0					
	Р					
	Q					
	R					
	S					
	Т					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
,	V	
	w	
	х	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.